

**BEST AVAILABLE COPY****REMARKS/ARGUMENTS**

This communication is in response to the Office Action mailed April 8, 2005. Applicant respectfully submits that the obviousness rejections in the Office Action are improper and should be withdrawn.

Before proceeding to respond directly to the rejection, Applicant wishes to broadly review some of the procedural history in this application, going back to final rejection before the present RCE was filed.

In the final rejection (mailed September 8, 2004), the claims were rejected as being obvious over Pereira in view of Maruyama.

In an initial response to the rejection (filed November 8, 2004), Applicant did not amend the claims. However, Applicant argued in part (see page 10 of the response) that

- The secondary reference (Maruyama) does not distinguish among usage by an operating system entity and usage by any other entity.
- Furthermore, the Examiner's apparent contention with respect to the secondary reference (Maruyama) that the "maximum value MAX" is the "limiting value" and the "usage" is the "distribution retry count" is inconsistent, since the "limiting value" cannot be both the "reference load data" and the "maximum value MAX."
- According to MPEP 2143.01, it is insufficient to recognize *in hindsight* that modifying the disclosure of a primary reference (Pereira) to include features of the secondary reference (Maruyama) "would improve" the teachings of the primary reference (Pereira). Rather, that the combination would yield an improvement must be found in the references themselves or in knowledge held by one of ordinary skill.

After receiving an unfavorable Advisory Action, Applicant then provided proposed amendments and spoke to the Examiner telephonically. The Examiner indicated the proposed amendments to the claims would overcome the final rejection. Applicant filed the present RCE, and the Examiner has now essentially repeated the former obviousness rejection, replacing the primary reference (Pereira) with a new primary reference (Nilsson).

Unfortunately, however, the serious deficiencies with the Examiner's previous reliance on the secondary reference (Maruyama) are incorporated broadly into the present rejection. In doing so, the Examiner has not addressed Applicant's arguments, either by modifying the contentions -- with respect to Maruyama specifically or with respect to the manner of combining the references -- or by directly refuting or otherwise addressing Applicant's arguments.

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Furthermore, there are also deficiencies in the primary reference (Nillson). Finally, like the combination of Pereira and Maruyama before, the Nillson and Maruyama references are improperly combined.

### Summary of Claimed Subject Matter Recited in Claim 1

Applicant's present claim 1 is directed to a method of dynamically checking a set of one or resource controls associated with resource consumption of newly added software to an operating system. While the operating system is executing, resource controls associated with the newly-added operating system software are integrated into resource controls already associated with the operating system software (before addition of the newly-added operating system software). The resource controls have limiting values associated therewith.

In response to a request for one of the resources by an operating system entity, it is determined whether usage of the one resources exceeds one of the limiting values for the resource controls. The request is granted if the limiting value has not been exceeded.

### The Examiner Mischaracterizes the Primary Reference (Nillson)

The Examiner contends that Nillson discloses a method of dynamically checking a set of one or more resource controls associated with resource consumption of newly added software to an operating system. Unfortunately, the Examiner once again appears to be blurring the quite explicit distinction between operating system programs and application programs. Furthermore, contrary to the Examiner's contention, Applicant can find nothing in Nilsson that discloses "integrating resource controls" associated with newly-added software (whether operating system software, as recited in claim 1, or not) to resource controls already associated with software (again, whether operating system software, as recited in claim 1, or not) before addition of the newly-added software.

The Examiner cites the following three portions of Nillson as support for the allegation that Nillson discloses integrating resource controls associated with newly added operating system software into an integrated set of resource controls:

[Abstract] In telecommunications switching system, software is frequently modified, enhanced or replaced altogether by new versions. The implementation or integration of the new or revised software into the operational system must be accomplished in accordance with strict requirements for not disturbing the ongoing activities of the system. Therefore, it is desirable that the system not be halted while the change to the new software is made. Rather, the preferred approach is to be able to replace software

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modules with new versions on the fly, during system operation. The smooth modification made possible in the disclosed system allows such changes with minimal disturbance to ongoing activities. The disclosed system provides the ability to change software during operation by treating the dynamic operations of a telecommunications system as a set of parallel, independent transactions, with each transaction consisting of a series of connected activities. Such a transaction is generally a functional element associated with a particular user of the system, e.g., a subscriber or an operator, such as a call to be processed or a command to be executed by the system.

Basically, the Abstract discloses replacing software modules of an "operational system" with new versions on the fly, during system operation. There is no disclosure in the Abstract of adding software to an "operating system" (which is not the same as an "operational system"), nor is there any disclosure in the Abstract of "resource controls" at all, let alone a disclosure of "checking" or "integrating" resource controls.

[Col. 12, lines 23-37] This is possible in this system because the applications software has the capability to reproduce its state in the new software version. An important feature of this aspect of the system of the present invention is that although the changes are, internally, quite abrupt, the changes are transparent to the system users as well as to the traffic being processed. The traffic can be redirected to the new software version without causing any observable interruption to processing. Another advantage in this aspect of the present invention is that the old software version remains in the system, albeit in a passive mode. Therefore, if the new software version is shown to have problems or to be incorrect, a rollback to the old software version is still possible with no major or longer interruption in processing.

This portion discusses "the applications software" (again, not "operating system" software) that can reproduce its state in a new software version. Traffic being processed can be redirected to the new software version without causing any observable interruption to processing. In addition to clarifying that the new modules are "applications software" (and not operating system software), there also is no disclosure in this section of "resource controls," "checking" resource controls" or "integrating" resource controls.

[Col. 20, lines 4-27] 1. For use in conjunction with computer apparatus, while it is processing existing data with existing software and receiving new data to be processed, a method of automatically passing data processing control of the computer apparatus to new software without materially disrupting the processing of the existing data by the existing software while allowing both software versions to generate output data simultaneously, said method comprising the steps of:

installing the new software in the computer apparatus;

using the new software to process test data at the same time as both the existing and new actual data are being processed by the existing software;

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automatically transferring processing control of all new data to the new software subsequent to its successful processing of said test data while continuing to use the existing software to process existing data and generating output data from both the new and old software simultaneously; and

automatically transferring complete data processing control to the new software subsequent to its successful processing of said new data.

This portion of the disclosure is Nillson's claim 1. Broadly speaking, the claim recites installing the new software, generating test data using the new software while the old software and new software simultaneously process actual data, processing new data using the new software and the old software when the test data is successfully processed, and transferring complete control to the new software when the new data is successfully processed.

Like the other cited portions of Nillson, nothing in Nillson's claim 1 discloses "resource controls," "checking" resource controls" or "integrating" resource controls. In fact, it appears that, while Nillson discloses new and old software executing simultaneously, the new and old software is not integrated. To the contrary, the software is run in parallel (but separately) to apparently isolate any issues that may arise with the new software until the new software is thoroughly validated. When the new software is fully relied upon, the results of the old software are no longer used. The old software and new software are never integrated.

With respect to the Examiner's allegation that Nillson discloses resource controls, in an integrated set of resource controls, having one or more limiting values associated therewith, the Examiner references col. 4, lines 40-48 and col. 21, lines 18-21. The eight line portion at col. 4, lines 40-48, discusses "a percentage of live sample traffic handled by the new software" being "varied between zero and one hundred percent" and, when all calls are completely handled by the new software, the old software is removed from the system. There is nothing in this cited portion that discloses resource controls, checking resource controls or integrating resource controls.

The cited portion at col. 21, lines 18-21, discloses transferring, from old software to new software, transactions still being processed by the old software after expiration of a preselected time period. Again, there is nothing in this cited portion that discloses resource controls, checking resource controls or integrating resource controls.

In summary, then, Nillson does not deal at all with adding new "operating system" software, only "applications software." These are not equivalent. Furthermore, Nillson does not

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disclose "resource controls associated with operating system software," let alone "integrating" resource controls or "checking" resource controls as these features are recited in claim 1.

If the Examiner continues to rely on Nillson, then it would be useful to advance prosecution of this application if the Examiner would state with more particularity (e.g., by referring to reference numerals from the Nillson figures), which portions of Nillson are considered to support the allegations made in the rejection of claim 1.

### The Examiner Mischaracterizes the Secondary Reference (Maruyama)

The Maruyama reference was previously employed by the Examiner as the secondary reference in an obviousness rejection (using a different reference — i.e., not the Nillson reference as the primary reference). In response, Applicant cited a number of deficiencies in the Examiner's reliance on the Maruyama reference. Among those cited deficiencies are

- The processor current load is not disclosed as being usage by an operating system entity.
- A predicted load is not usage.
- It is not clear what the Examiner considers to be "limiting values."
- "Usage" cannot be both the "predicted load" and the "distribution retry count."

In advancing the current rejection, the Examiner has employed verbatim the language of the previous rejection, without addressing at all either Applicant's arguments against the Examiner's characterization of Maruyama, or clarifying the rejection in response to Applicant's reservations as to which portions of Maruyama the Examiner considers to disclose the features recited in claim 1.

Applicant incorporates by reference herein in its entirety the arguments previously made against the Examiner's use of the Maruyama reference, and Applicant respectfully requests the Examiner to either withdraw his reliance on Maruyama or to cite with particularity (e.g., by referring to reference numerals in the figures) which portions of Maruyama are considered to disclose the features recited in claim 1.

For example, which portion of Maruyama is considered to be an "operating system entity?" Which portion of Maruyama is considered to disclose a "resource," and which portion

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of Maruyama is considered to disclose a "request" for that resource? Which portion of Maruyama is considered to disclose a "limiting value" or "limiting values?" Which portion of Maruyama is considered to disclose "determining whether usage" of that resource by that operating system entity exceeds that limiting value? Which portion of Maruyama is considered to disclose granting the requested resource?

As discussed previously, and incorporated above, as Maruyama is best understood by Applicant, in an earnest good faith attempt to understand the Examiner's rejection, it is respectfully submitted that Maruyama discloses none of these features.

### Motivation for Combination is not Sufficient for a Prima Facie Case of Obviousness

As with the previous obviousness connection (combination of Pereira and Maruyama), the current obviousness rejection is similarly flawed. In particular, the Examiner has not stated a proper motivation for combining Pereira and Maruyama.

Virtually identical to before (i.e., merely substituting the word "Nillson's" for "Pereira's"), the Examiner's stated motivation for combining the references is "Maruyama's method of assigning and comparing load values to resources would improve Nilsson's system of distributing different resources by being able to tell which resource has exceeded its predetermined threshold value."

In the first place, the Examiner has not even stated what are the "different resources" that are allegedly distributed by the Nilsson disclosure. In any event, the Examiner points to nothing in either Nilsson or Maruyama, or knowledge held by one of ordinary skill in the art, that suggests Maruyama's method would improve Nilsson's system. This is required by MPEP 2143.01. The "teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art, not in applicant's disclosure." See MPEP 2143.

A bald, unsupported assertion that the teachings of a secondary reference "would improve" the teachings of a primary reference are insufficient. The Examiner has not pointed to anything in the references or knowledge held by one of ordinary skill in the art regarding the alleged improvement, including a reasonable expectation of success. The Examiner must be relying on the impermissible hindsight gleaned from Applicant's disclosure, and the obviousness rejection is insufficient for this reason, too.

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Clearly, one would not be motivated to modify the Nillson disclosure in view of Maruyama. Nillson deals with adding a new version of application software and completely transitioning to the new version after both reliably processing test values with the new software and also reliably processing new data with the new software. Maruyama, on the other hand, deals with using load prediction for system optimization. The subject matter of these disclosures is so clearly different, there does not appear to be any functional or structural overlap beyond that both references disclose software executing on computer systems.

**BEST AVAILABLE COPY****CONCLUSION**

For at least the reasons stated above, then, the Examiner has not made a proper prima facie case that the combination of Nillson and Maruyama in fact yields the subject matter recited in claim 1. Applicant's arguments similarly apply to the remaining independent claims. Furthermore, because the rejections of the dependent claims are premised on the propriety of the rejection of claim 1, the rejections of the dependent claims are similarly improper. Applicant thus respectfully requests that the rejections of the claims be withdrawn, and Applicant respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at (650) 314-5324.

Respectfully submitted,

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